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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,262	07/31/2003	Thomas Glen Harmer	0233-0001	3387
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BEEM PATENT LAW FIRM			FISCHMANN, BRYAN R	
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,			3618	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/633,262	HARMER ET AL.			
Office Action Summary	Examiner	Art Unit			
	Bryan Fischmann	3618			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
 1) Responsive to communication(s) filed on <u>27 September 2004</u>. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 					
Disposition of Claims					
 4) Claim(s) 1-13 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 13 is/are allowed. 6) Claim(s) 1-3 and 5-12 is/are rejected. 7) Claim(s) 4 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 					
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on 31 July 2003 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	☐ accepted or b)☒ objected to b drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119		•			
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12-22-03.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa				

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Acknowledgments

1. The Preliminary Amendment filed 9-27-2004 has been entered.

Specification

- 2. The abstract of the disclosure is objected to because of the following:
- A) The use of the term "novel" in the abstract is objected to, as the abstract should not compare the merits of the present invention to the prior art. Also, as set forth in this Office Action, some aspects of the claimed invention are not considered "novel". (see MPEP 608.01(b)).
 - B) The abstract uses legal terms such as "means" (see MPEP 608.01(b)).
- 3. The specification is objected to because of the following:
- A) The following recited phrases are unclear, awkwardly worded, and/or grammatically incorrect:

Note: The specification is considered replete with instances of awkward and sometimes unclear wording. Therefore, the Examiner cannot guarantee the following is a comprehensive listing of all awkward and unclear wording. Applicant is advised to review the specification for awkward and unclear wording.

- 1) The recitation of "each strut assemblies" in paragraph 0010 is considered awkward.
- 2) The title "BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS" recited on the upper portion of page 4 seems a bit awkward and is not consistent with the title for the "description of the drawings section" as set forth in Section 608 of the MPEP.

3) Some of the "drawing descriptions" on page 4 do not seem consistent with the corresponding drawing figures.

For example, page 4 recites "FIG. 2 is an elevation view of the sulky of FIG. 1". However, Figure 2 appears to instead be a "plan view".

Similarly, page 4 recites "FIG. 3 is a plan view of the sulky of FIG. 1".

However, Figure 3 appears to instead be an elevation view.

Request Applicant review all "drawing figure descriptions" on page 4 to assure they are accurate.

4) Paragraph 0041 recites "Continuing with FIG. 2, in another embodiment...".

As best understood, Figure 2 is the same embodiment as Figure 1.

5) Paragraph 0044 recites "In one embodiment, shown in FIGS. 6 and 7...one or more wings 72 that frame a recess 74...".

Figures 6 and 7 fail to illustrate reference number 74.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the wheel cover Velcro mountings as recited in claim 12 must be shown or the feature canceled from the claim. No new matter should be entered.

Claim Objections

5. Claims 7 and 10 are objected to because of the following:

A) Regarding claim 7, to be grammatically correct, the word "angled" recited on line 4, should instead be "angle".

B) The use of the trademark Velcro has been noted in claim 12. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claim 1 recites "A sulky to be drawn by a horse comprising, a generally tubular arch...a pair of strut assemblies depending downwardly from generally opposite ends of said arch...a pair of rails mounted to said arch, each of said rails extending generally in a longitudinal direction from said arch to a distal end, said distal ends of said rails being

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adapted for harnessing said horse between said rails, a pair of supports, one support being connected to one of said rails at one end thereof and to one of said strut assemblies at the other end thereof and the other support being connected to the other of said rails at one end thereof and to the other of said strut assemblies at the other end thereof; wherein the connection between each support and the corresponding rail is adjustable to allow for substantially longitudinal alignment of said wheels".

As best understood, the "adjustable connection" between each support, best understood to be reference number 46, and the corresponding rail, best understood to be reference numbers 24 and 26, is shown in Figures 4 and 5. This adjustable connection consists of an arm, reference number 62, which fits inside the support, reference number 46. The arm is fixed to the rail, and from examination of Figures 4 and 5, it would appear that the support may be moved laterally with respect to the rail, and fixed laterally relative to the rail by means of set screw 64. Since the support is connected to the struts, 42 and 44, which are best understood to be welded to the arch 14, and upon which the wheels are mounted, apparently lateral movement of each support is intended to cause the supports to cause the struts to "twist" relative to the arch, which would affect longitudinal alignment of each wheel.

However, from examination of Figure 1, it is not considered clear how this would occur. From the Engineering discipline of "Mechanics of Materials", it is generally understood, that when forces are applied to a structure, such as caused by manual lateral movement of the support relative to the rail, that deflections of the structure generally occur at the "weakest point". Note that Figure 1 shows that the rails and

supports are relatively long and slender and that the struts are fairly short in length relative to the rails and supports and that the cross-section of the struts is much larger than the cross-section of the rails and supports. Based on this, when the forces created by the lateral movement of the support relative to the rail is imposed upon the sulky structure, it would appear from the engineering discipline of Mechanics of Materials, that the forces imposed on the rail and support, which are configured as long slender "cantilever beams", will tend to cause the support and rail to tend to deflect laterally, as opposed to causing the struts to twist angularly relatively to the arch. Note also that the relatively short length of arm 62 would allow only very limited lateral movement of support 46 relative to rail.

Due to this, it is not clear that the inventors, at the time the invention was made had possession of the invention as set forth in claim 1.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 9. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicants regard as their invention.
- A) It is considered unclear how the connection between each support and the corresponding rail is adjustable to allow for substantially longitudinal alignment of the wheels, as set forth in claim 1, for reasons set forth in the 112 1st portion of this Office Action.

A) Claim 2 recites "...wherein said arch and said strut assemblies are positioned for substantially longitudinal alignment of said wheels before welding".

Since the term "welding" has not been introduced into claim 2 until the end of the claim, it is considered unclear what is meant by the recitation of "welding" above, when read in context.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 11. Claims 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Gaines, et al, US Patent 3,103,369.

Gaines teaches a wheel assembly for a sulky to be drawn by a horse, comprising:

a wheel having two sides, a set of tubular spokes, and a rim (Figure 1); and a pair of substantially planar covers (14) mounted on opposite sides of said wheel and substantially covering said tubular spokes.

Regarding claim 11, see reference number 30 of Gaines, noting that the cover is mounted to the wheel via other components.

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Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over King, US Patent 4,033,598.

King teaches a sulky to be drawn by a horse, comprising;

a generally tubular arch (20-22) having two ends;

a seat (30) mounted to said arch between said ends;

a pair of strut assemblies (18 and 19) depending downwardly from generally opposite ends of said arch, each of said strut assemblies for receiving a wheel (Figure 1);

a pair of rails (36 and 38) mounted to said arch, one rail being mounted on one side of said seat and the other rail being mounted on the other side of said seat, each of said rails extending generally in a longitudinal direction from said arch to a distal end, said distal ends of said rail being adapted for harnessing said horse between said rails.

King fails to explicitly state that the arch and said strut assemblies are positioned for substantially longitudinal alignment of said wheels before welding.

However, note that lines 31-33 of column 3 of King teaches that the arch and strut assemblies are welded to each other. Since it does not appear that the wheel longitudinal alignment of King is adjustable after welding the arch to the struts of King, it

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would have been obvious to one of ordinary skill in the art to substantially horizontally align the wheels of the sulky before welding the arch to the struts of King. Otherwise, if the wheels were not substantially aligned before welding, the sulky would not run "straight", and there would be no way to correct the misalignment of the longitudinal alignment of the wheels.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substantially longitudinally align the wheels of King before welding the arch of King to the struts of King.

14. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, US Patent 4,078,829, in view of Lockwood, US Patent 450,167.

Davis teaches a sulky to be drawn by a horse, comprising:

- a generally tubular arch (17) having two ends;
- a pair of laterally spaced wheels mounted generally at opposite ends of said arch (Figure 1);
 - a seat (71) mounted to said arch between said ends and said wheels;
- a pair of rails (12 and 13) mounted to said arch and extending forwardly, one of said rails being mounted to said arch on one side of said seat, and the other of said rails being mounted to said arch on the other side of said seat, and;

each of said rails having a distal end adapted for harnessing said horse between said rails.

Davis fails to teach that the rail has a proximal portion mounted to the arch and a distal portion pivotally connected to said proximal portion so that said distal portion can

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pivot with respect to said proximal portions. Davis instead teaches that the distal and proximal portions of the rail are fixed relative to each other.

However, Lockwood teaches a sulky comprising a rail, the rail having a proximal portion (A) and a distal portion (D) pivotally connected (at C) to said proximal portion so that said distal portion can pivot with respect to said proximal portions. Lockwood teaches that the pivotally adjustable rail is advantageous in that it facilitates "harnessing" the rail to animals of different heights (lines 19-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to pivotally connect the proximal and distal ends of the rails of Davis, as taught by Lockwood.

15. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein, et al, US Patent 6,095,536, in view of WO 93/19969.

Stein teaches a sulky to be drawn by a horse comprising:

a pair of laterally spaced wheels (52) mounted generally at opposite ends of a generally tubular arch (36), there being a longitudinal wheel center line between said pair of wheels;

a seat (42) mounted to said arch between said ends and said wheels;

a first rail (12 – left side) and a second rail (12 – right side) extending from said arch, each rail having a proximal end mounted to said arch and a distal end adapted for harnessing to said horse, said first rail being mounted to said arch on one side of said seat and said second rail being mounted to said arch on the other side of said seat (see drawing figures);

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wherein a portion (28) of said first rail proximate said arch is angled toward said wheel center line.

Stein fails to teach that a wheel centerline and a horse centerline are offset from one another.

However, WO 93/19969 teaches a sulky where the wheel centerline is offset from the horse centerline (Figure 2). A wheel centerline that is offset from a horse centerline as shown in Figure 2 of WO 93/19969 is advantageous in that the "outboard" wheel may be further from the sulky rail, thus allowing the sulky to be made shorter, thereby improving speed, while allowing the horse to not contact the sulky "outboard wheel" when rounding a turn on a race track.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a wheel centerline that is offset from the horse centerline in the sulky of Stein, as taught by WO 93/19969.

Regarding claim 6, see Figure 2 of Stein, while noting the use of the term "about" in claim 6.

16. Claim 9 is rejected under 35 U.S.C. 103(a) as being anticipated by Gaines, et al, US Patent 3,103,369, in view of Stein, et al, US Patent 6,095,536.

Gaines teaches a wheel assembly for a sulky to be drawn by a horse, comprising:

a wheel having two sides, a set of tubular spokes, and a rim (Figure 1); and a pair of substantially planar covers (14) mounted on opposite sides of said wheel and substantially covering said tubular spokes.

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Gaines fails to teach the sulky structure beyond the "wheel area".

However, Stein teaches a sulky to be drawn by a horse, comprising;

a generally tubular arch (36) having two ends;

a seat (42) mounted to said arch between said ends;

a pair of rails (12), one rail being mounted to said arch on one side of said seat, the other rail being mounted to said arch on the other side of said seat, said rails extending in a generally longitudinal direction from said arch to distal ends, said distal ends of said rails being adapted for harnessing said horse between said rails (Figure 2);

a pair of laterally spaced wheel assemblies mounted generally at opposite ends of said arch;

wherein each of said wheel assemblies includes a wheel having two sides (Figures 1 and 2).

The above sulky structure of Stein is necessary to make the sulky operational.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the wheel assembly of Gaines would include the sulky structure of Stein.

17. Claim 12 is rejected under 35 U.S.C. 103(a) as being anticipated by Gaines, et al, US Patent 3,103,369.

Gaines fails to teach that the covers are mounted with Velcro. Gaines instead uses a fastener.

However, the Examiner takes Official Notice that Velcro is often used as a substitute for a fastener. For example, clothing often uses Velcro fasteners in place of a

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fastener, such as a button, or zipper. Note that Velcro performs the equivalent function as a fastener, but is advantageous in that no tools are required for assembly, or disassembly, and that Velcro is less time consuming to use, when compared to fasteners.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the covers of Gaines could be mounted with Velcro.

Double Patenting

18. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. Claims 5-8 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10/865,297. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims, particularly independent claim 5 of the Instant Application and claim 1 of the '297 application claim the same

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basic sulky structure and the additional limitation in each independent claim that the "horse centerline" and the "sulky centerline" are offset from one another.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

- 20. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 21. Claims 7 and 8 would be allowable if rewritten to overcome the double patenting rejections set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 22. Claim 13 is allowed.

Reasons for Allowance

23. The following is an Examiner's statement of reasons for allowance of independent claim 13:

Claim 13 recites the limitation of a sulky to be drawn by a horse, comprising; a generally tubular arch having two ends; a pair of laterally spaced wheels, a seat mounted to said arch, a pair of rails mounted to said arch and extending forwardly, each rail having a proximal portion mounted to the arch and a distal portion pivotally connected to said proximal portion so that said distal portion can pivot with respect to said proximal portions, wherein said distal end of each distal portion moves over a

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predetermined lateral range of between about 4 inches and about 4 1/2 inches when said distal portion pivots with respect to said proximal portion. This limitation, in combination with the other limitations of claim 13, were not found in the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cleveland – teaches a sulky with a pivotal rail

25. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bryan Fischmann whose telephone number is (571) 272-6694. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis, can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BRYANTISCHMANN PRIMARY EXAMINER